



INVITATION TO BID

BID #50018-210022

DOOR REPLACEMENTS for CARVER HALL

Bid Opening Date

April 20, 2021 @ 2:00 P.M.

Mandatory Site Visit before Bid Opening

Site Visits will be conducted on between

10:00 a.m., APRIL 6th or 7th, 2021

contact Renee Harris, Project Manager

Cell: 318-243-7864

Email: harrispat@gram.edu

Grambling State University

Purchasing Office

403 Main Street

Grambling, LA 71245

All bid must be submitted to the Purchasing Dept. Email:

PurchasingBids@gram.edu

Due to the COVID-19 Public Health Emergency declared by Governor John Bel Edwards in Proclamation Numbers 41, 33, 32, 30, 27, and 25 JBE 2020, everyone is required to wear a Mask and use Social Distancing Measures.

INSTRUCTIONS TO BIDDERS

ARTICLE 1

DEFINITIONS

- 1.1 The Bidding Documents include the following:
1. Instructions to Bidders.
 2. Bid Form
 3. General Conditions of the Contract to **DOOR REPLACEMENTS for CARVER HALL** Supplementary (and amended General) Conditions.
 4. Divisions of the Technical Specifications.
 5. Addenda issued during bid period. (by Owner and acknowledged in bid form)
- 1.2 Addenda are written or graphic instruments issued prior to the execution of the Contract which modify or interpret the bidding documents, including Drawings and Specifications, by additions, deletions, clarifications or corrections. Addenda will become part of the Contract Documents when the Contract is executed.

ARTICLE 2

BIDDER'S REPRESENTATION

- 2.1 Each bidder by submitting a bid represents that s/he has read and understands the bidding documents.
- 2.2 Each bidder by making a bid represents that s/he has visited the site and familiarized themselves with the local conditions under which the work is to be performed.
- 2.3 Each bidder by submitting a bid understands they must be fully qualified under any state or local licensing law for Contractors in effect at the time and at the location of the project before submitting a bid. In the State of Louisiana; only the bids of contractors and sub-contractors duly licensed under Louisiana Revised Statute 37:2150, et. seq., **that PROVIDE PROOF of the Mandatory SITE VISIT** will be considered. The Contractor shall be responsible for ensuring all Sub-contractors or prospective Sub-contractors are duly licensed in accordance with the statute above.
- 2.4 Each bidder submitting a bid understands that GSU's Public Works Policy related to contractor licensure is that a contractor's license is required for any/all projects with an anticipated/bid cost greater than \$50,000.

ARTICLE 3

BIDDING PROCEDURES

- 3.1 Bids must be prepared on the forms provided by the Owner and submitted in accordance with the Instructions to Bidders.
- 3.2 A bid will be considered invalid if not faxed, emailed, hand delivered or USPS at the designated location prior to the time and date for receipt of bids.
- 3.3 Unless otherwise provided in any supplement to these Instructions to Bidders, no bidder shall modify, withdraw or cancel his bid or any part thereof for thirty days after the receipt of bids. However, written request (letter or telegram) for the withdrawal of a bid or any part thereof will be granted if the request is received prior to the specified time of opening.
- 3.4 **Due to the COVID-19 Public Health Emergency declared by Governor John Bel Edwards in Proclamation Numbers 41, 33, 32, 30, 27, and 25 JBE 2020, electronic bid delivery is being utilized for this ITB.**

All copies of each bid must be received by electronic copy to PurchasingBids@gram.edu, on or before the date and time specified in the Advertisement for Bids: Bid #_____ Bid Submission – [Bidders' Name]. If the file size of the email submission exceeds server requirements, the email submission may be broken into smaller emails with “Part 1 of ____” included at the end of each original Subject Line (e.g. ITB #_____ Bid Submission – [Bidders' Name] – Part 1 of 3).

E-mail submissions are the only acceptable method of delivery. Fax, mail, and courier delivery shall not be acceptable. Proposers e-mailing their proposals should allow sufficient time to ensure receipt of their proposal by the date and time specified. Grambling State University assumes no liability for assuring accurate/complete e-mail transmission and receipt. The responsibility solely lies with each Bidder to ensure their bid is received at the specified email address prior to the deadline for submission. Bids received after the deadline, corrupted files, and incomplete submissions will not be considered.

**All bids shall be opened and read on April 20, 2021, at 2:00 P.M.,
GSU Purchasing Teleconference: Number 1-917-900-1022, Conference ID: 5600581#**

- 3.5 Prior to the receipt of bids, Addenda, if any, will be mailed or delivered (hard copy or email) to each person or firm recorded by the Owner as having received the bidding documents and will be available for inspection wherever the bidding documents are kept available for that purpose. Addenda issued after receipt of bids will be mailed or delivered only to the sealed bidder.
- 3.6 Bids for Public Works will not be considered or accepted unless the bid is accompanied by bid security in an amount of not less than five percent (5%) of the sum of the Base Bid and any Alternates. The bid security shall be in the form of a certified check drawn on a bank insured by the Federal Deposit Insurance Corporation, or a bid bond written by a surety company licensed to do business in Louisiana, accompanied by appropriate power of attorney and in favor of Grambling State University. **(Not applicable for this IFB)**

- 3.7 All Bids and Sureties must be signed by a duly authorized person of the firm or corporation and be accompanied by legal evidence authorizing the signature as valid.
- 3.8 Any interpretation, correction or change of the Bidding Documents will be made by Addendum. Interpretations, corrections or changes of the Bidding Documents made in any other manner will not be binding, and bidders shall not rely upon such interpretations, corrections and changes.
- 3.9 If bidding other than as specified, an indication must be made on the bid form, stating manufacturer's name and model number(s) being submitted for bid. Detailed specifications, drawings, pictures, brochures, diagrams or any other literature or information necessary to determine the equality of the bid response must be included with the bid form.
- 3.10 Prior to the issuance of a purchase order the successful bidder must submit the following items to the Purchasing Department:
- a. Current Business License (from state of filing)
 - b. Contractor's License Number (in good standing with the state of Louisiana)
 - c. Insurance Certificate (as specified under Article 3 of this document)
 - d. Proof of filing of Performance Bond with Power of Attorney, if Public Works
 - e. Resolution, if incorporated.

ARTICLE 4

EXAMINATION OF BIDDING DOCUMENTS

- 4.1 Each bidder shall examine the bidding documents carefully and, not later than seven days prior to the date for receipt of bids, shall make written request to the Owner for interpretation or correction of any ambiguity, inconsistency or error therein which he may discover. Any interpretation or correction will be issued as an Addendum by the Owner. Only a written interpretation or correction by Addendum shall be binding. No bidder shall rely upon any interpretation or correction given by any other method.

ARTICLE 5

SUBSTITUTIONS

- 5.1 Each bidder represents that his bid is based upon the materials and equipment described in the bidding documents.

MANUFACTURER'S NUMBERS OR TRADE NAMES:

- 5.2 Where a manufacturer's product is named or specified, it is understood that "or equal" shall apply, whether stated or not. Such name and number is meant to establish the standard of quality desired and does not restrict bidders to the specific brand, make, manufacturer, or specification named; and are set forth and convey to prospective bidders the general style, type, character, and quality of product desired; and that equal products will be acceptable. Grambling State University shall be sole judge as to whether or not the material is equal to that specified.

ARTICLE 6

REJECTION OF BIDS

- 6.1 The bidder acknowledges the right of the Owner to reject any or all bids and to waive any informality or irregularity in any bid received. In addition, the bidder recognizes the right of the Owner to reject a bid if the bidder failed to furnish any required bid security, or to submit the data required by the bidding documents, or if the bid is in any way incomplete or irregular.

ARTICLE 7

AWARDS

- 7.1 Awards may not be made to any person, firm, or company in default of any contract. Said person, firm, or company shall be considered non-responsible bidders and may be reinstated and awards made to them only after they have given evidence of good faith and have satisfactorily completed their obligations.

PUBLICIZING AWARDS

- 7.2 Written notice of award shall be sent to the successful bidder. In procurement over \$25,000, each unsuccessful bidder shall be notified of the award provided that he/she submitted with his/her bid a self-addressed envelope requesting this information. Notice of award will be made a part of the procurement file.

RIGHT TO PROTEST

- 7.3 Any person who is aggrieved in connection with the solicitation or award of a contract shall protest to the Director of Purchasing. Protests with respect to a solicitation shall be submitted in writing at least two days prior to the opening of bids on all matters except housing of state agencies, their personnel, operations, equipment, or activities pursuant to R.S. 39:1643 for which such protest shall be submitted at least ten days prior to the opening of bids. Protests with respect to the award of a contract shall be submitted in writing within fourteen days after contract award.

AUTHORITY TO RESOLVE PROTESTS:

- 7.4 Prior to the commencement of an action in court concerning any controversy, the Director of Purchasing or his designee shall have the authority, to resolve the protest of any aggrieved person concerning the solicitation or award of a contract. This authority shall be exercised in accordance with regulations.

ARTICLE 8

PERFORMANCE BOND AND LABOR AND MATERIAL PAYMENT BOND

- 8.1 Performance and Payment Bonds shall be required on Public Works projects with an expected cost greater than \$50,000. Performance and Payment Bonds, when required, shall be provided in an amount of 100% of the contract price. Performance and Payments Bonds shall be required by the successful bidder. Any surety bond required shall be written by a surety or insurance company currently on the U. S. Department of the Treasury Financial Management Service list of approved

bonding companies which is published annually in the Federal Register. For any Public Works projects, no surety or insurance company shall write a bond which is in excess of the amount indicated as approved by the U. S. Department of the Treasury Financial Management Service list. The surety bond written for a Public Works project shall be written by a surety or insurance company that is currently licensed to do business in the State of Louisiana.

- 8.2 The bidder shall require the attorney in fact who executes the required bonds on behalf of the surety to affix thereto a certified and current copy of his power of attorney indicating the monetary limit of such power.

RECORDING OF BOND AND CONTRACT

- 8.3 The Contractor shall record the Contract and Performance Bond with the Clerk of Court in Lincoln Parish and provide the Purchasing Department with proof of filing.

ARTICLE 9

PAYMENT

- 9.1 Payment will be made by Grambling State University.
- 9.2 The contractor will be required to provide a Clear Lien Certificate from the Lincoln Parish Clerk of Court, a process that may take an average 45 days for final payment.

ARTICLE 10

TAXES

- 10.1 Applicable taxes are to be included in lump sum bid.

ARTICLE 11

GUARANTEE

- 11.1 The materials and labor under this contract, as described in the specifications, shall be guaranteed by the Contractor for a period of one year from date of its acceptance against defects of materials or workmanship. Any defects which develop during this period shall be properly repaired or replaced without cost to the Owner as soon as possible.

ACCEPTANCE

- 11.2 The guarantee covering materials and labor under this contract will begin the date a Notice of Acceptance is issued to the Contractor by Grambling State University.

ARTICLE 12

CHANGES IN THE WORK

- 12.1 A Change Order is a written order to the Contractor signed by the Owner, issued after execution of the Contract, authorizing a Change in the Work or an adjustment in the Contract Sum or the Contract Time. The Contract Sum and the Contract Time may be changed only by Change Order. A Change Order signed by the Contractor indicates his agreement therewith, including the adjustment in the

Contract Sum or the Contract Time. Any Change Order not signed by the Owner will be considered null and void.

- 12.2 The Owner, without invalidating the Contract, may order changes in the Work within the general scope of the Contract consisting of additions, deletions or other revisions, the Contract Sum and the Contract Time being adjusted accordingly. All such changes in the Work shall be authorized by Change Order, and shall be performed under the applicable conditions of the Contract Documents.
- 12.3 Any change order in excess of the contract limit as defined herein shall be let out for public bid. The term contract limit as used herein shall be equal to the sum of \$30,000 per project. When the Change Order is negotiated it shall be fully documented and itemized as to cost, including material quantities, material costs, insurance, employee benefits, other related costs, profit and overhead. Where certain unit prices are contained in the initial contract no deviation shall be allowed in computing negotiated change order cost.

SUPPLEMENTARY CONDITIONS

ARTICLE 1

CONTRACTOR

CONTRACTOR'S LICENSE

- 1.1 The Contractor shall certify that s/he is licensed under Act 377 of the 1976 Louisiana Regular Legislative Session and show the contractor license number and the bid number on the Bid Form; except projects financed, partially or wholly, with Federal Funds, provided that any successful Bidder before signing Contract thereon, files application for a license and pays the fee as provided in this Act and complies with all terms and provisions of this Act and with the rules and regulations of the Licensing Board.

CONTRACTOR'S AFFIDAVIT

- 1.2 In accordance with the Louisiana R.S. 38:2190 - 2220, if the Contract is awarded to the successful Bidder, the bidder shall, at the time of the signing of the Contract, execute the AFFIDAVIT included in the Contract Documents.

INTEREST

- 1.3 There shall be no payment of interest on money owed.

ARTICLE 2

PAYMENTS AND COMPLETION

SUBSTANTIAL COMPLETION

- 2.1 The Owner will issue a NOTICE OF ACCEPTANCE for the Contractor to record with the Clerk of Court in Lincoln Parish.

FINAL COMPLETION AND FINAL PAYMENT

- 2.2 The Contract is to provide that the contractor is not to be paid more than ninety percent (90%) of the amount of the contract upon completion of the work. The Contractor shall record the NOTICE OF ACCEPTANCE with the Lincoln Parish Clerk of Court and shall furnish a CLEAR LIEN CERTIFICATE from the Clerk of Court within forty-five days after recordation of NOTICE OF ACCEPTANCE. At that time, the remaining ten percent (10%) will be paid.

LIQUIDATED DAMAGES

- 2.3 The Owner will suffer financial loss if the Project is not substantially complete on the date set forth in the CONTRACT DOCUMENTS. The Contractor (and/or Surety) shall be liable for and shall pay to the Owner Liquidated Damages for each calendar day of delay until the work is Substantially Complete. The Completion Time stated in Consecutive Calendar Days and the Liquidated Damages stated in Dollars Per Day are listed in the PROPOSAL FORM

ARTICLE 3

INSURANCE

INSURANCE: Contractor shall procure and maintain for the duration of the contract insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work hereunder by the Contractor, his agents, representatives, employees or subcontractors. **The cost of such insurance shall be included in the Contractor's bid.**

A. MINIMUM SCOPE OF INSURANCE

Coverage shall be at least as broad as:

1. Insurance Services Office form number GL 0002 (Ed. 1/73) covering Comprehensive General Liability and Insurance Services Office form number GL 0404 covering Broad Form Comprehensive General Liability; or Insurance Services Office Commercial General Liability coverage ("occurrence" form CG 0001). **"Claims Made" form is unacceptable. The "occurrence form" shall not have a "sunset clause."**
2. Insurance Services Office form number CA 0001 (Ed. 1/78) covering Automobile Liability and endorsement CA 0025 or CA 0001 12 90. The policy shall provide coverage for owned, hired, and non-owned coverage. If an automobile is to be utilized in the execution of this contract, and the vendor/contractor does not own a vehicle, then proof of hired and non-owned coverage is sufficient.
3. Workers' Compensation insurance as required by the Labor Code of the State of Louisiana, including Employers Liability insurance.

B. MINIMUM LIMITS OF INSURANCE

Contractor shall maintain limits no less than:

1. Commercial General Liability: \$1,000,000 combined single limit per occurrence for bodily injury, personal injury and property damage.
2. Automobile Liability: \$1,000,000 combined single limit per accident, for bodily injury and property damage.
3. Workers Compensation and Employers Liability: \$1,000,000 Each Accident, \$1,000,000 Each employee, Workers' Compensation limits as required by the Labor Code of the State of Louisiana and Employers Liability coverage.

C. DEDUCTIBLES AND SELF-INSURED RETENTIONS

Any deductibles or self-insured retentions must be declared to and approved by the Agency. At the option of the Agency, either: the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects the Agency, its officers, officials, employees and volunteers; or the Contractor shall procure a bond guaranteeing payment of losses and related investigations, claim administration and defense expenses.

D. OTHER INSURANCE PROVISIONS

The policies are to contain, or be endorsed to contain, the following provisions:

1. General Liability and Automobile Liability Coverage \$2,000,000 Each Occurrence

- a. The Agency, its officers, officials, employees, Boards and Commissions and volunteers are to be added as "additional insured" as respects liability arising out of activities performed by or on behalf of the Contractor; products and completed operations of the Contractor, premises owned, occupied or used by the Contractor. The coverage shall contain no special limitations on the scope of protection afforded to the Agency, its officers, officials, employees or volunteers. It is understood that the business auto policy under "Who is an insured" automatically provides liability coverage in favor of Grambling State University and the State of Louisiana.
- b. Any failure to comply with reporting provisions of the policy shall not affect coverage provided to the Agency, its officers, officials, and employees, Boards and Commissions or volunteers.
- c. The Contractor's insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.

2. Workers' Compensation and Employers Liability Coverage

The insurer shall agree to waive all rights of subrogation against the Agency, its officers, officials, employees and volunteers for losses arising from work performed by the Contractor for the Agency.

3. All Coverage

Each insurance policy required by this clause shall be endorsed to state that coverage shall not be suspended, voided, canceled by either party, or reduced in coverage or in limits except after thirty (30) days' prior written notice by certified mail, return receipt requested, has been given to the Agency.

E. ACCEPTABILITY OF INSURERS

Insurance is to be placed with insurers with an A.M. Best's rating of **"A- VI or higher"**. This requirement will be waived for workers' compensation coverage only for those contractors whose workers' compensation coverage is placed with companies who participate in the State of Louisiana Workers' Compensation Assigned Risk Pool or the Louisiana Workers' Compensation Corporation.

F. VERIFICATION OF COVERAGE

Contractor shall furnish the Agency with certificates of insurance affecting coverage required by this clause. The certificates for each insurance policy are to be signed by a person authorized by that insurer to bind coverage on its behalf. The certificates are to be received and approved by Grambling State University before work commences. Grambling State University reserves the right to require complete, certified copies of all required insurance policies, at any time.

G. SUBCONTRACTORS

Contractor shall include all subcontractors as insured under its policies or shall furnish separate certificates for each subcontractor. All coverage for subcontractors shall be subject to all of the requirements stated herein.

DIVISION 1 - GENERAL REQUIREMENTS

A. SUMMARY OF THE WORK

1. Work under this Contract shall include, but is not necessarily limited to, the following as summarized; to West Campus Eight (8) Bungalow Roof Repairs. (**SEE PART I**)

B. LAWS, RULES AND REGULATIONS

1. Contractor shall comply with all applicable federal, state, local and University laws, ordinances, rules and regulations and shall: furnish and pay for all required permits, licenses and bonds; pay all charges and fees, and give all notices necessary and incidental to the due and lawful work required under this project.

C. ALTERNATES

1. Base Bid

D. SITE INSPECTIONS AND PROJECT MEETINGS

1. Site Inspections

Each bidder by making a bid represents that s/he has visited the site and familiarized themselves with the local conditions under which the work is to be performed.

2. Pre-Work Conference

Prior to the Contractor beginning any work on this project, the University will conduct a Pre-Work Conference to review and approve the Contractor's work schedule and inform the Contractor of any special conditions, controls and regulations that apply to the project.

E. TEMPORARY FACILITIES AND CONTROLS

1. Safety Conditions

The Contractor shall post adequate warning signs and maintain safety lights as required to warn persons of hazardous conditions.

2. Security

The Contractor shall be responsible for security of his equipment, materials, etc., at the project site for the duration of the contract.

F. MATERIAL AND EQUIPMENT

1. Transportation and Handling

The Contractor shall provide for all transportation and handling required for the work on this project.

2. Storage and Protection

The Contractor shall be responsible for storage and protection of equipment and materials. The Contractor shall Protect all property of the Owner, and shall repair same, if damaged.

SCOPE OF WORK:

Remove and replace 30 existing doors, replace hardware and paint existing hollow-metal frames. Refinish 4 solid core wood doors, replace hardware and paint existing hollow-metal frames. Paint 4 full glass hollow-metal entry doors, replace hardware and paint existing hollow-metal entry door framing.

Provide materials and equipment that are indicated and/or specified to be incorporated into Work as follows:

- A. Conform to applicable specifications and standards.
- B. Comply with size, make, type, and quality indicated and/or specified or as specifically approved in writing by Architect.
- C. Manufactured and Fabricated Products:
 - 1. Design, fabricate and assemble in accordance with best engineering and shop practices.
 - 2. Manufacture like parts of duplicate units to standard sizes and gauges, to be interchangeable.
 - 3. Two or more items of same kind shall be identical and by same manufacturer.
 - 4. Products shall be suitable for service conditions.
 - 5. Equipment capacities, sizes and dimensions shown or specified shall be adhered to unless variations are specifically approved by Architect in writing.
- D. Do not use materials or equipment for any purpose other than that for which it is designed or is specified.

PART ONE - HOLLOW METAL DOORS

RELATED DOCUMENTS

General: Bidding and/or Negotiations Requirements, General Conditions of the Contract, Supplementary Conditions, pertinent portions of sections in Division 1 of the Project Specifications and the Drawings shall apply to the Work of this Section.

WORK INCLUDED

Scope: Provide hollow metal doors and frames as indicated on Drawings and specified herein.

RELATED WORK

General: Following items of related work are included in other sections:

- A. Door hardware
- B. Glass and glazing
- C. Field painting

QUALITY ASSURANCE

Standards: Provide doors and frames complying with Steel Door Institute "Recommended Specifications: Standard Steel Doors and Frames" (S.D.I.-100) and as herein specified.

Manufacturer: Provide standard steel doors by a single firm specializing in production of this type work.

Fire-Rated Assemblies: Provide fire-rated doors as indicated that have been investigated and tested as fire door assemblies, complete with hardware to be used. Identify each fire door with recognized testing laboratory labels, indicating applicable fire rating of doors. Construct and install assemblies to comply with N.F.P.A. Standard No. 80, and as herein specified.

SUBMITTALS

General: Submit in accordance with requirements of Section 01 33 23 - "Shop Drawings, Product Data and Samples"

Product Data: Submit manufacturer's specifications for fabrication and installation, including data substantiating that products comply with requirements.

Shop Drawings: Submit for fabrication and installation of steel doors. Include elevations of door design types, conditions at openings, details of construction, location and installation requirements of finish hardware and reinforcements, and details of joints and connections. Show anchorage and accessory items. Provide schedule of doors using same reference numbers for details and openings as those on Contract Drawings.

SUBSTITUTIONS

General: For products specified herein, Bids shall be based on products named in Project Manual, or on items which Architect has designated as an "approved equal". A product not named in Project Manual or that is not approved by Architect will only be acceptable when such product meets all other requirements of Project Specifications, including specifications of originally specified products' manufacturer as of date of Contract Documents.

Requests for Substitutions: Requests for Architects approval of a product as equal will not be considered unless sufficient data for evaluation is received by Architect seven (7) days prior to the Bid Opening Date.

Submittals: Submit a separate request for each Product in accordance with requirements of Section 01 62 00 - "Substitutions and Product Options".

Note: Architect's or Owner's approval of an item for a previous project does not constitute approval for this Project.

DELIVERY, STORAGE AND HANDLING

Delivery: Deliver hollow metal work in carton or crated to provide protection during transit and job storage.

Inspections: Inspect hollow metal work upon delivery for damage. Minor damages may be repaired provided finish items are equal in all respects to new work and acceptable to Architect; otherwise, remove and replace damaged items as directed without additional cost to Owner.

Storage: Store doors at Project site under cover. Place units on wood sills at least 4 inches high, or otherwise store on floors in manner that will prevent rust and damage. Avoid use of non-vented plastic or canvas shelters which could create humidity chamber. If cardboard

wrapper on door becomes wet, remove carton immediately. Provide 1/4 inch spaces between stacked doors to promote air circulation.

PART TWO - PRODUCTS

ACCEPTABLE MANUFACTURERS

General: Provide steel frames by one of following: Curries, Amweld Building Products Division; Ceco Corporation; Fenestra; SteelCraft Manufacturing Company; or approved equal.

MATERIALS

Hot-Rolled Steel Sheets and Strip: Commercial quality carbon steel, pickled and oiled, complying with ASTM A-569 and ASTM A-568.

Cold-Rolled Steel Sheets: Commercial quality carbon steel, complying with ASTM A-366 and ASTM A-568.

Galvanized Steel Sheets: Zinc-coated carbon steel sheets of commercial quality, complying with ASTM A-526, with ASTM A-525, G60 zinc coating, mill phosphatized.

Supports and Anchors: Fabricate of not less than 18 gauge galvanized sheet steel.

Inserts, Bolts and Fasteners: Manufacturer's standard units, except hot-dip galvanize items to be built into exterior walls, complying with ASTM A-153, Class C or D as applicable.

Shop Applied Primer: Rust-inhibitive enamel or paint, either air-drying or baking, suitable as a base for specified finish paints.

STANDARD STEEL DOORS

General: Provide hollow metal steel doors of types and styles indicated on Drawings or schedules.

Interior Doors: Fabricate exposed faces of doors and panels, including stiles and rails of non- flush units, from cold-rolled steel; 18 gauge unless indicated otherwise.

Exterior Doors: Fabricate exterior doors and panels from 18 gauge galvanized sheet steel. Close bottom edges of exterior doors as integral part of door construction or by addition of inverted steel channels. Close top edge of exterior doors with flush construction to exclude water from door interior.

FABRICATION

General: Fabricate steel door units to be rigid, neat in appearance and free from defects, warp or buckle. Wherever practicable, fit and assemble units in manufacturer's plant. Clearly identify work that cannot be permanently factory-assembled before shipment, to assure proper assembly at Project site.

Exposed Fasteners: Unless otherwise indicated, provide countersunk flat Phillips heads for exposed screws and bolts.

Finish Hardware Preparation: Prepare doors and frames to receive finish hardware in accordance with final Finish Hardware Schedule (see Section 08710) and templates provided by hardware supplier. Comply with applicable requirements of ANSI A-115 series specifications for door and frame preparation for hardware.

Hardware: Reinforce doors and frames to receive surface-applied hardware. Drilling and tapping for surface-applied finish hardware may be done at Project site. Locate hardware in connection with hinged or other swing type doors and frames as follows unless indicated or specified otherwise:

- A. Locks, Panic Devices, Latches: 40-5/16 inches from finish floor to center of strike.
- B. Deadlocks with Separate Latchset or Pull: 52 inches from finish floor to center line of strike.
- C. Top Hinge: To manufacturer's standard, but not greater than 10 inches from head of frame to center line of hinge.
- D. Bottom Hinge: To manufacturer's standard, but not greater than 12-1/2 inches from finish floor to center line of hinge.
- E. Intermediate Hinge: Equally spaced between top and bottom hinge.
- F. Door Pulls: 40-5/16 inches from finish floor to center of grip.
- G. Push Plates: 45 inches from finish floor to center of plate.

Shop Painting: Clean, treat, and paint exposed surfaces of steel doors and frame units, including galvanized surfaces. Clean steel surfaces of mill scale, rust, oil, grease, dirt, and other foreign materials before application of paint. Apply shop coat of prime paint of even consistency to provide a uniformly finished surface ready to receive finish paint.

PART THREE - EXECUTION

INSPECTION

General: Installer must examine substrate and conditions under which steel doors and frames are to be installed and must notify Contractor and Architect in writing of any conditions detrimental to proper and timely completion of work. Do not proceed with work until unsatisfactory conditions have been corrected in manner acceptable to Installer.

INSTALLATION

General: Install standard steel doors and accessories in accordance with final shop drawings and manufacturer's data, and as herein specified.

ADJUSTMENT AND CLEANING

Prime Coat Touch-Up: Immediately after erection, sand smooth any rusted or damaged areas of prime coat and apply touch-up of compatible air-drying primer.

Final Adjustments: Check and readjust operating finish hardware items, leaving steel doors and frames undamaged and in complete and proper operating condition.

FINISH HARDWARE

PART 1 - GENERAL

1.01 SECTION INCLUDES

Hardware for swinging, sliding, and folding doors except special types of unique and non-matching hardware specified in other sections.

1.02 RELATED WORK

- A. Hollow Metal Doors and Frames
- B. Flush Wood Doors
- C. Overhead Sectional Doors
- D. Metal Framed Storefronts
- E. Automatic Operators
- F. Electrical

1.03 REFERENCES

- A. ADA - Americans with Disabilities Act of 1990 including Accessibility Guidelines as amended by the D.O.J. September 15, 2010, as adopted by the Authority Having Jurisdiction (AHJ).
- B. ANSI A117.1 - Buildings and Facilities - Providing Accessibility and Usability for Physically Handicapped People.
- C. ANSI/DHI – A115.IG Installation Guide for Doors and Hardware.
- D. FEMA P-361 – Safe Rooms for Tornados and Hurricanes.
- E. NFPA 80 - Fire Doors and Windows.
- F. NFPA 101 – Life Safety Code
- G. IBC - International Building Code, as adopted by public Authority Having Jurisdiction (AHJ).
- H. State and local Rules and Regulations for Barrier Free Facilities, as adopted by AHJ.

1.04 DOOR HARDWARE TYPES

- A. Types of finish hardware required include, but is not necessarily limited to, the following:
 - 1. Pivot sets and intermediate pivots.
 - 2. Hinges.
 - 3. Lock cylinders.
 - 4. Keys, keying, and key control.
 - 5. Locksets, latchsets, and privacy sets.
 - 6. Exit devices.
 - 7. Closers.
 - 8. Mullions.
 - 9. Overhead, wall, and floor stops.
 - 10. Protection plates.
 - 11. Gasketing for exterior and interior doors, as required.
 - 12. Door holders.
 - 13. Door bottoms.
 - 14. Thresholds.
 - 15. Silencers.
- B. Requirements for design, grade, function, finish, size and other distinctive

qualities of each type of door hardware is indicated elsewhere in this section or in the Door Hardware Schedule at the end of this section. Refer to Part 2 Products for Manufacturer's identification and allowable substitutions.

1.05 **SUBMITTALS**

- A. Under provisions of Section 01 34 00, submit the following:
1. Product information: Manufacturer's published technical product data for all specified door hardware items indicating compliance with the requirements.
 2. Hardware Schedule:
 - a. Hardware schedules are intended for the Contractor's coordination of the work. Review and acceptance by the Architect or Owner does not relieve the Contractor of his exclusive responsibility to fulfill the requirements as shown and specified.
 - b. Submit hardware schedule in the manner and format as specified, complying with the actual construction progress schedule requirements for each draft. Include the following information:
 - 1) Explanation of all abbreviations, symbols, codes, at the like, including door handing.
 - 2) Type, style, function, size, and finish of each hardware item.
 - 3) Door and frame sizes and materials cross referenced to the Architect's marks in the door schedule.
 - 4) Room identification (name and number) on each side of door opening as indicated on the drawings.
 - 5) Product name, model number, description, and name of manufacturer of each item.
 - 6) Fastenings and other pertinent information.
 - 7) Locations of hardware cross referenced to architectural floor plans and door schedules.
 - 8) Mounting heights and locations of each type of hardware.
 3. Key Schedule:
 - a. Require a qualified representative of the hardware supplier to personally meet with the Owner and Architect to obtain the Owner's written key requirements.
 - b. Include a separate key schedule, showing clearly how the Owner's instructions on keying of locks has been fulfilled.
 - c. Verify with the owner, prior to bid, the existing level of the Sargent key system and adjust cylinder types accordingly.
 4. Samples: Upon request, submit actual material samples of items indicated as for color selection.
 5. Templates: Hardware supplier will furnish hardware templates to the Contractor for each fabricator of doors, frames, and other work to be shop prepared or factory prepared for the installation of hardware. Upon request check shop drawings of such other work, to conform that adequate provisions are made for proper location and installation of hardware.
 6. Provide electrical operation technical sheets including product schematics, point to point diagrams, and electrical requirements of all electrified hardware. Completely coordinate with the general contractor, electrical engineer, electrician, security access subcontractor and the installer. Operational descriptions are for demonstration only – verify operational

- intent with the owner, architect and electrical engineer.
7. Secure All system shall contain software, card programmers, extra programmable cards and owner instruction if required.
- B. Under provisions of Section 01 70 00, submit the following:
1. Product information.
 2. Hardware schedule.
 3. Manufacturer's published operation and maintenance data. Include data on operating hardware, lubrication requirements, and inspection procedures related to preventative maintenance.
 4. Tools and extra materials as required.
 5. Manufacturer's warranties, revise to meet criteria as established within this section. Warranty periods shall commence upon acceptance of the building by the owner. Where warranties listed exceed the manufacturer's standard warranty, obtain in writing an extended warranty to meet the requirements above and as noted. If the manufacturer will not meet these requirements, and another approved manufacturer will comply, supply the alternate approved manufacturer.

1.06 **QUALITY ASSURANCE**

- A. Acceptable Designs:
1. Items specified in this section are products which are of acceptable design.
 2. Do not substitute products without Architect's written prior approval per Section 01 60 00. Requests for approval shall be submitted by factory authorized distributor firms representing the products proposed for substitution. Items that are noted to allow no substitution are matching existing materials and the owner's material inventory for servicing the facility.
- B. Qualifications:
1. Manufacturer: Manufacturers named in Part 2 of this section with not less than 5 years' experience in manufacturing commercial door hardware of the type indicated.
 2. Hardware Supplier:
 - a. A recognized architectural finish hardware supplier who has been furnishing hardware in the same state as the project for a period of not less than 5 years.
 - b. Hardware supplier's organization shall include an experienced Architectural Hardware Consultant (AHC), certified by the Door and Hardware Institute (DHI), who is physically available, at reasonable times during the work, for consultation about project's hardware requirements, to Owner, Architect and Contractor. Mail or telephone correspondence is not acceptable.
 - c. Hardware supplier shall have local warehousing facilities and shall maintain an adequate parts inventory of items supplied for future service to the owner. Supplier will be a factory authorized distributor of all hardware specified.
 3. Installer: Company specializing in installing work of this section with not less than 5 years' experience and acceptable to the manufacturers and the hardware supplier. Maintain regular work force of qualified personnel, trained, skilled, and experienced in installing door hardware and constant, competent supervision per the requirements of the General Contractor. The hardware installer shall meet with the representatives of the General

Contractor and hardware supplier to jointly inventory all hardware items. Upon satisfactory inventory of products, the hardware installer accepts responsibility for all hardware items inventoried.

C. **Regulatory and Operational Requirements:**

1. Provide hardware for all openings, whether specified or not, in compliance with NFPA Standard No. 80, proper operation and local building code requirements. Where required, provide only hardware which has been tested and listed by UL or FM for types and sizes of doors required and complies with requirements of door and door frame labels. Label hardware, as required, for compliance with pressure testing criteria as dictated in IBC.
2. Provide hardware which meets or exceeds handicap accessibility per local building code requirements. Conform to the Americans with Disabilities Act (ADA) of 1990 as amended by the D.O.J. September 15, 2010, as adopted by the Authority Having Jurisdiction (AHJ).

1.07 **DELIVERY, STORAGE, HANDLING, AND PROTECTION**

A. Deliver, store, handle, and protect products to project site under provisions of Section 01 60 00 and as specified herein.

B. Require hardware supplier to:

1. Tag each item or package separately, with identification related to final hardware schedule.
2. Include manufacturer's basic installation instructions with each item or package.
3. As material is received by hardware supplier from various manufacturers, sort and repackage in containers with each item clearly marked with appropriate opening numbers to match the approved hardware schedule. Two or more identical items may be packed in the same container.
4. Deliver individually packaged hardware items at the proper times to the proper locations (shop or project site) for installation.
5. Inventory hardware jointly with representatives of the General Contractor, hardware supplier and the hardware installer until each is satisfied that count is correct. Refer to paragraph 1.6-B-3.

C. Protect hardware from theft by cataloging and storing in a secure and lockable area. Control the handling and installation of hardware items which are not immediately replaceable, so that the completion of the work will not be delayed by hardware losses, both before and after installation. Replace lost, missing, damaged, or stolen door hardware items at no additional cost to the Owner as required to meet schedule requirements.

1.08 **SEQUENCING AND SCHEDULING**

A. Coordinate work of this section with the work of other sections of work under provisions of Section 01 04 00

B. Furnish hardware templates to each fabricator of doors, frames, and other work to be shop or factory prepared for the installation of hardware.

C. Verify completeness and suitability of door hardware with the hardware supplier and the hardware installer.

1.09 **MAINTENANCE MATERIALS**

A. Under provisions of Section 01 70 00, furnish to Owner a complete set of special wrenches and tools applicable to each different or special hardware component as needed for Owner's continued adjustment, maintenance,

- removal, and replacement of door hardware.
- B. Special tools and accessories shall be supplied by the hardware component manufacturer.

PART 2 - PRODUCTS

2.01 MATERIALS AND FABRICATION

- A. General:
1. Provide all door hardware for complete work, in accordance with the drawings and as specified herein.
 2. Quantities listed, in any instance, are for the Contractor's convenience only and are not guaranteed.
 3. Provide items and quantities not specifically mentioned to ensure a proper and complete operational installation. Match the quality and finish of items specified.
 4. Provide miscellaneous hardware as listed in hardware groups.
- B. Hand of door: Drawings show direction of slide, swing or hand of each door leaf. Door schedule indicates door and frame sizes, materials, required fire ratings, and other pertinent information. Furnish each item of hardware for proper installation and operation of door movement as indicated.
- C. Manufacturer's Name Plate: Do not use manufacturer's products which have manufacturer's name or trade name displayed in a visible location (omit removable name plates), except in conjunction with required UL or FM labels and as otherwise acceptable to the Architect. Manufacturer's identification will be permitted on rim of lock cylinders and latch faceplates only.
- D. Base Metals: Produce hardware units of basic metal and forming method indicated, using manufacturer's standard metal alloy, composition, temper and hardness, but in no case of lesser (commercially recognized) quality than specified for applicable hardware units by applicable ANSI A156 series standard for each type hardware item and with ANSI A156.18 for finish designations indicated. Do not furnish "optional" materials or forming methods for those indicated, except as otherwise specified.
- E. Fasteners: Provide hardware manufactured to conform to published templates, generally prepared for machine screw installation. Do not provide hardware which has been prepared for self-tapping sheet metal screws, except as specifically indicated.
1. Screws: Furnish screws for installation, with each hardware item. Provide Phillips flat head screws except as otherwise indicated. Finish exposed (exposed under any condition) screws to match hardware finish or, if exposed in surfaces of other work, to match finishes of such other work as closely as possible, including "prepared for paint" in surfaces to receive painted finish.
 2. Concealed Fasteners: Provide concealed fasteners for hardware units which are exposed when door is closed, except to extent no standard units of type specified are available with concealed fasteners. Do not use thru-bolts for installation where bolt head or nut on opposite face is exposed in other work, except where it is not feasible to adequately reinforce the work. In such cases, provide sleeves for each thru-bolt or use sex screw fasteners.

2.02 CONTINUOUS HINGES

- A. Manufacturer:

1. Listed in Door Hardware Schedule: Stanley
 2. Approved Substitutions: Hager
- B. Supports doors up to 600 lbs.
- C. Continuous hinges are to have a limited lifetime warranty for the life of the building.

2.03 **LOCK CYLINDERS**

- A. Manufacturer:
1. Listed in Door Hardware Schedule: Best
 2. Substitutions: None – facility standard
- B. All lock cylinders shall be equipped with 7-pin tumbler small format interchangeable core lock cylinders. The interchangeable core shall be removable by a special control key. The control key shall have no cuts in common with grandmaster keys which operate with a shear line completely independent from the shear line of the grandmaster, master, and operating keys. All cores shall have a special limited keyway and shall be removable without removing the cylinder, knob, or core housing of any type lock or lockset. The removable core shall be instantly interchangeable without modification for use in any lock throughout the system. Provide brass construction cores for the construction period. Plastic construction cores are not acceptable. Construction cores shall remain the property of the hardware supplier and will be returned upon incorporation of the permanent key system.
- C. Coordinate cylinder types to match the existing Best master key system.
- D. Construct lock cylinder parts from brass/bronze, stainless steel, or nickel silver.

2.04 **KEYS, KEYING, AND KEY CONTROL**

- A. Keys:
1. Material: Provide keys of nickel silver only.
 2. Quantities: These quantities are to establish a maximum allowable quantity of cut keys to service the project and may not necessarily be assigned as noted. A lesser quantity of cut keys required will not result in any credits, nor a quantity of uncut keys to be issued unless noted otherwise.
 - a. 3 change keys per each cylinder unit.
 - b. 4 master keys per master.
 - c. 2 control keys
 - d. 2 construction control keys
 - e. 10 construction keys.
 3. Deliver keys to the Owner's representative: Send master keys to the Owner via U.S. registered mail direct from hardware supplier or manufacturer.
- B. Keying:
1. Comply with Owner's written instructions for master keying and, except as otherwise indicated, provide individual change keys for each lock which is not designated to be keyed alike with a group of related locks.
 2. Grandmaster key all cylinder items to coordinate with the Owner's instructions, coordinate cylinder types to match the existing Sargent master key system. Allow for expansion. Permanently inscribe each key with the notation "DONOT DUPLICATE".

2.05 **EXIT DEVICES AND MULLIONS**

- A. Manufacturer:
1. Listed in Door Hardware Schedule: Precision 2100

2. Approved Substitutions: Dorma 9000 Series
 - B. Provide risers, as needed, to prevent interference with door glazing kits.
 - C. Provide spacers as needed for proper application of removable mullions on narrow stop type frames.
 - D. Devices will be architecturally finished as specified. Powder coat finish will not be allowed.
 - E. Exit devices and related hardware shall be warranted for a period of five years.
- 2.06 **CLOSERS:**
- A. Manufacturer:
 1. Listed in Door Hardware Schedule: Stanley QDC 100 Series
 2. Approved Substitutions: LCN 4040 XP DEL Series
 - B. Size of Units: Except as otherwise specifically indicated, comply with the manufacturer's recommendations for size of door control unit, depending on the size of the door, exposure to weather and anticipated frequency of use.
 - C. Provide manufacturer's standard through bolt attachment where door construction is not adequate for support.
 - D. Arms:
 1. Provide parallel arms for all overhead closers, except as otherwise indicated. Provide drop plates as needed to prevent glazing interference.
 - E. Mount all closers to the maximum allowable degree of opening by the closer manufacturer's template. Where closer arms incorporate dead stop features, mount closers to the maximum degree of opening available before conflict with adjacent structures. If not apparent on the contract documents, verify the use of open space with the Architect or Owner's Representative to determine the maximum allowable degree of opening.
 - F. Access Free Manual Closers: Where manual closers are indicated for doors required to be accessible to the physically handicapped, provide adjustable units complying with ANSI A117.1 provisions for door opening force. Fire protection has precedence over handicap compatibility, check with local jurisdiction.
 - G. Provide closers with the manufacturer's standard adjustable delayed closing feature.
 - H. Door closers and related hardware shall be warranted for a period of twenty-five years.
- 2.07 **WALL AND FLOOR STOPS**
- A. Manufacturers:
 1. Listed in Door Hardware Schedule: Trimco
 2. Approved Substitutions: Ives
 - B. General: Except as otherwise indicated, provide stops (wall, floor or overhead) at each leaf of every swinging door leaf.
- 2.08 **PROTECTION PLATES**
- A. Manufacturers:
 1. Listed in Door Hardware Schedule: Trimco
 2. Approved Substitutions: Ives
 - B. Types: Armor Plates, Kick Plates, Mop Plates
 - C. Fasteners: Provide manufacturer's standard exposed Phillips head fasteners for door trim units; either machine screws or self-tapping sheet metal type screws per manufacturer's recommendations for application to the specified door construction.
 - D. Sizes: Fabricate protection plates (armor, kick or mop) not more than 2" less than door width on stop side and not more than 1" less than door width on pull

side, x the height indicated.

- E. Metal Plates: Stainless Steel, 18 gauge (0.050) thick. Satin finish, US32D (630), beveled four edges (B4E).

2.09 **GASKETS AND SWEEPS**

- A. Manufacturer:
 - 1. Listed in Door Hardware Schedule: National Guard
 - 2. Approved Substitutions: Reese
- B. General: Except as otherwise indicated, provide continuous weather-stripping at each edge of every exterior door leaf. Provide type, sizes and profiles indicated as drawn or scheduled.
- C. Fasteners: Provide non-corrosive fasteners as recommended by the manufacturer for applications indicated.
- D. Replaceable seal strips: Provide only those units where resilient or flexible seal strip is easily replaceable and readily available from stocks maintained by the manufacturer.
- E. Perimeter weather-stripping: Flexible, hollow neoprene bulb or loop insert, conforming to MIL R 6055, Class II, Grade 40.
- F. Weather-stripping at Door Bottoms: Provide door bottoms consisting of contact type resilient insert and metal housing of design and size indicated.
- G. Hot smoke seal, if required by IBC and subsequent UL testing procedures, will be supplied as an integral part of the door assembly by the door manufacturer.
- H. Gaskets and sweeps shall be warranted for a period of three years.

2.10 **THRESHOLDS**

- A. Manufacturer:
 - 1. Listed in Door Hardware Schedule: National Guard
 - 2. Approved Substitutions: Reese
- B. Except as otherwise indicated provide standard metal threshold unit of type, size and profile as detailed or scheduled.
- C. Where there is conflict between scheduled thresholds and details, details shall have precedence. Revise details only if necessary to comply with handicap accessibility requirements. Notify the Architect of such required modifications.
- D. Verify all existing conditions and revise if necessary. All thresholds must be within ADA parameters. Notify the Architect of required revisions if applicable.
- E. Thresholds and related items shall be warranted for a period of three years, abrasive coatings shall be warranted for a period of ten years.

2.11 **SILENCERS**

- A. Manufacturers:
 - 1. Listed in Door Hardware Schedule: Trimco
 - 2. Approved Substitutions: Ives

2.12 **FINISHES**

- A. Exposed surfaces of hardware shall be Brushed Chrome (US26D, 626), unless otherwise indicated. Items specified in Satin Stainless Steel (US32D, 630) shall be supplied in stainless steel with no exceptions.
- B. The designations used in the schedule and elsewhere to indicate hardware finishes are the industry recognized standard commercial finishes common to

the product's manufacturer listed.

PART 3 - EXECUTION

3.01 EXAMINATION

- A. Under provisions of Section 01 04 00, examine and verify that substrates and project site conditions are ready to receive work of this section.
- B. Do not begin installation until finishes indicated to be field applied have been applied to doors, frames, and similar items requiring project site finishing and are thoroughly dry and cured.
- C. Do not begin installation until unsatisfactory conditions are corrected in a manner acceptable to the installer. Beginning installation means installer accepts project site conditions and substrates as ready to receive work of this section.

3.02 INSTALLATION

- A. General: The types and approximate quantities of door hardware required for this project are indicated at the end of this section.
- B. Key Cabinet: Install in location as indicated on drawings or as directed by the Architect.
- C. Heights: Mount hardware units at heights indicated in "Recommended Locations for Builders Hardware for /standard Steel Doors and Frames" by the Door and Hardware Institute, except as specifically indicated or required to comply with governing regulations, and except as may be otherwise directed by the Architect.
- D. Substrates: Adjust and reinforce attachment substrates as necessary for proper installation and operation of hardware.
- E. Installation:
 - 1. Install each hardware item in compliance with the manufacturer's instructions, requirements of NFPA 80, NFPA 101, IBC, ADA, State Rules and Regulations for Barrier Free Facilities and recommendations of the DHI.
 - 2. Set unit's level, plumb and true to line and location. Adjust and reinforce the attachment substrate as necessary for proper installation and operation.
 - 3. Drill and countersink units which are not factory prepared for fasteners. Space fasteners and anchors in accordance with industry standards.
 - 4. Where not factory machined, machine cut for hardware per template, as required.
 - 5. Cut and fit thresholds and floor covers to profile of door frames. Join units with concealed welds. Cut smooth openings for spindles, bolts, or similar items. Screw thresholds to substrate with the manufacturer's standard flat head sleeve anchor (FHSL), 1/4-20 x 2" unless otherwise noted. Fill cavities of thresholds at sound rated openings with 1 inch thick (uncompressed thickness) low density fiberglass sill sealer insulation full width and length of the threshold. In addition to fastening requirements, set thresholds for exterior doors in a full bed of butyl-rubber or polyisobutylene mastic sealant.
 - 6. Do not install hardware which is incomplete or apparently improper for application. Notify the hardware supplier immediately of any such deficiencies. Failure to comply with this requirement indicates the

hardware installer's acceptance of responsibility for proper application and performance.

F. **Cutting and Patching:**

Wherever cutting and fitting is required to install hardware onto or into surfaces which are later to be painted or finished in another way, coordinate removal, storage and reinstallation or application of surface protections with finishing work specified in the Division-9 sections.

G. Where existing components are to receive new hardware, prepare the existing component to accept the new hardware as specified. If the existing component cannot be fabricated to accept the new hardware, or if the revisions will result in a voided label, immediately contact the architect for direction.

3.03 **ADJUSTING**

A. Initial Adjustment:

1. Adjust and check each operating item of hardware and each door, to ensure proper operation or function of every unit. Adjust resilient faced sound stops for continuous contact with door and threshold. Adjust weather-stripping and sweeps to completely seal doors with frames and to adjacent structures.
2. Replace units which cannot be adjusted to operate freely and smoothly as intended for the application made.

B. Final Adjustment: Wherever hardware installation is made more than one month prior to acceptance or occupancy of a space or area, return to the work during the week prior to acceptance or occupancy, and make final check and adjustment of all hardware items in such space or area. Clean operating items as necessary to restore proper function and finish of hardware and doors. Adjust door control devices to compensate for final operation of heating and ventilating equipment.

3.04 **DEMONSTRATION**

Instruct Owner's personnel in proper adjustment and maintenance of hardware and hardware finishes, during the final adjustment of hardware.

3.05 **CLEANING AND DEBRIS**

A. Cleaning:

1. Clean work under provisions of Section 01 70 00
2. Clean adjacent surfaces soiled by work of this section.

B. Debris: Under provisions of Section 01 50 00, remove debris from project site and legally dispose of off-site.

3.06 **MAINTENANCE**

A. Approximately six months after the acceptance of hardware in each area, the hardware installer shall:

1. Return to the project and re-adjust every item of hardware to restore proper function of doors and hardware.
2. Consult with and instruct Owner's personnel in recommended additions to the maintenance procedures.
3. Replace hardware items which have deteriorated or failed due to faulty design, materials or installation of hardware units.
4. Prepare a written report of current and predictable problems (of substantial nature) in the performance of the hardware and submit to the

Architect.

3.07 **PROTECTION**

Under provisions of Section 01 50 00, protect work of this section as required so that work will be without damage or deterioration at the time of completion and acceptance by the Owner.

3.08 **DOOR HARDWARE SCHEDULE**

List of Manufacturers

NA National Guard	Weather-strip, Thresholds
PR Precision	Exit Devices, Removable Mullions
BS Best	Cylinders
ST Stanley	Hinges, Closers
TR Trimco	Stops, Flat Goods

Finish Codes

<u>Code</u>	<u>Description</u>
626, 652	Brushed Chrome
630	Satin Stainless Steel
689	Painted Aluminum
BLK	Black
GREY	Grey

Option List

<u>Code</u>	<u>Description</u>
CD	Cylinder Dogging (Precision)
N Mounting (Trimco)	Spanner Through Bolt mounting
L Mounting (Trimco)	Spanner Back to Back Mounting
B4E (Trimco) CS (Trimco)	Beveled 4 Edges – Armor, Kick and Mop Plates Counter Sinking of Armor, Kick and Mop Plates
MS/EA SMS-TEKS	Machine Screws/Expansion Anchors (NGP) Self-Drilling Machine Screws (NGP)

SET #1A - Exterior

Doors: 203

2	Hinges	662HD x 7'0	Alum	ST
2	Exit Device	2101 CD 4'0	630	PR
2	Mortise Cylinder	1E74RP3	626	BS
2	Door Pull	1191-4 Type N Mounting	626	TR
2	Door Closer	QDC113	689	ST
2	Kick Plate	K0050 10" x 2" LDW B4E CS	630	TR
2	Door Stop	1214H	626	TR
1	Drip Cap	16 A FHW SMS-TEKS		NA
2	Gasketing	5040 B		NA

2	Door Sweep	200 NA SMS-TEKS	NA
2	Saddle Threshold	426 MS/EA	NA

SET #1B - Exterior

Doors: 208

2	Hinges	662HD x 7'0	Alum	ST
1	Exit Device	2103 CD 4'0	630	PR
1	Exit Device	2101 CD 4'0	630	PR
1	Rim Cylinder	12E71S2RP	626	BS
2	Mortise Cylinder	1E74RP3	626	BS
2	Door Pull	1191-4 Type N Mounting	626	TR
2	Door Closer	QDC113	689	ST
2	Kick Plate	K0050 10" x 2" LDW B4E CS	630	TR
2	Door Stop	1209HA	626	TR
1	Drip Cap	16 A FHW SMS-TEKS		NA
2	Gasketing	5040 B		NA
2	Door Sweep	200 NA SMS-TEKS		NA
2	Threshold	896N MS/EA		NA

SET #1C - Exterior

Door: 209

2	Hinges	662HD x 7'0	Alum	ST
1	Exit Device	2103 CD 4'0	630	PR
1	Exit Device	2101 CD 4'0	630	PR
2	Rim Cylinder	12E71S2RP	626	BS
1	Removable Mullion	KR822	689	BS
2	Mortise Cylinder	1E74RP3	626	BS
2	Door Pull	1191-4 Type N Mounting	626	TR
2	Door Closer	QDC113	689	ST
2	Kick Plate	K0050 10" x 2" LDW B4E CS	630	TR
2	Door Stop	1209HA	626	TR
1	Drip Cap	16 A FHW SMS-TEKS		NA
1	Gasketing	5040 B		NA
2	Door Sweep	200 NA SMS-TEKS		NA
1	Threshold	896N MS/EA		NA

SET #1B - Exterior

Door: 105

2	Hinges	662HD x 7'0	Alu m	ST
1	Exit Device	2103 CD 3'0	630	PR
1	Exit Device	2101 CD 3'0	630	PR
2	Rim Cylinder	12E71S2RP	626	BS
1	Removable Mullion	KR822	689	BS
2	Mortise Cylinder	1E74RP3	626	BS
2	Door Pull	1191-4 Type N Mounting	626	TR

2	Door Closer	QDC113	689	ST
2	Kick Plate	K0050 10" x 2" LDW B4E CS	630	TR
2	Door Stop	1209HA	626	TR
1	Drip Cap	16 A FHW SMS-TEKS		NA
1	Gasketing	5040 B		NA
2	Door Sweep	200 NA SMS-TEKS		NA
1	Threshold	896N MS/EA		NA

SET #2 – Stairs

Doors: 101, 102, 201, 202, 204, 205, 302

2	Hinges	662HD x 7'0	Alu m	ST
2	Exit Device	FL2108 x V4908D 4'0	630	PR
3	Rim Cylinder	12E71S2RP	626	BS
1	Removable Mullion	FLKR822	689	BS
2	Door Closer	QDC113	689	ST
2	Kick Plate	K0050 10" x 2" LDW B4E CS	630	TR
2	Door Stop	1209HA	626	TR
2	Mutes	1229A		TR

Omit door closers at opening 202, 204

SET #3 - Stairs

Door: 103, 104, 206, 207, 301, 303, 304, 305

2	Hinges	662HD x 7'0	Alum	ST
2	Exit Device	FL2108 x V4908D 3'0	630	PR
3	Rim Cylinder	12E71S2RP	626	BS
1	Removable Mullion	FLKR822	689	BS
2	Door Closer	QDC113	689	ST
2	Kick Plate	K0050 10" x 2" LDW B4E CS	630	TR
2	Door Stop	1209HA	626	TR
2	Mutes	1229A		TR

GLAZING PART

PART ONE - GENERAL

1.01 RELATED DOCUMENTS

General: Bidding and/or Negotiations Requirements, General Conditions of the Contract, Supplementary Conditions, pertinent portions of sections in Division 1 of the Project Specifications and the Drawings shall apply to the Work of this Section.

1.02 WORK INCLUDED

Scope: Provide glass and glazing as indicated on Drawings and specified herein.

Definitions: "Glass" includes prime glass, processed glass, and fabricated glass products.

"Glazing" includes glass installation and materials used to install glass.

Note: "Glass products" is hereby defined to include glazing plastics.

Types: Work of this Section include glass and glazing for:

A. Doors not indicated as "preglazed".

1.03 QUALITY ASSURANCE

Prime Glass Standard: FS DD-G-451

Heated-Treated Glass Standard: FS DD-G-1403

Safety Glass Standard: CPSC 16 CRF 1201

1.04 REFERENCE

Glazing Specifications: "Glazing Manual" by Flat Glass Marketing Association.

1.05 SUBMITTALS

General: Submit in accordance with requirements of Section 01 33 23 - "Shop Drawings, Product Data and Samples".

Product Data: Submit manufacturer's specifications for products and installation, including data substantiating that products comply with requirements.

1.06 SUBSTITUTIONS

General: For products specified herein, Bids shall be based on products named in Project Manual, or on items which Architect has designated as an "approved equal". A product not named in Project Manual or that is not approved by Architect will only be acceptable when such product meets all other requirements of Project Specifications, including specifications of originally specified products' manufacturer as of date of Contract Documents.

Requests for Substitutions: Requests for Architects approval of a product as equal will not be considered unless sufficient data for evaluation is received by Architect seven (7) days prior to the Bid Opening Date.

Submittals: Submit a separate request for each Product in accordance with requirements of Section 01 62 00 - "Substitutions and Product Options".

Note: Architect's or Owner's approval of an item for a previous project does not constitute approval for this Project.

PART TWO - PRODUCTS

2.01 ACCEPTABLE MANUFACTURERS

General: Provide glass by one of following: Viracon; Libbey-Owens-Ford Company; or approved equal.

2.02 GLASS PRODUCTS

Polished Wired Glass: Type III, Kind A, Form 1, Quality q11, clear and polished both faces, as follows:

- A. Thickness: 1/4 inch.
- B. Mesh: Type m3, square.
- C. Fire Rating: Provide glass listed and labeled by UL for "fire resistance".
- D. Use: Door lights in fire-rated doors.

2.03 GLAZING SEALANTS AND COMPONENTS

General: Provide color of exposed sealant/compound indicated or if not otherwise indicated, as selected by Architect from manufacturer's standard colors, or black if no color is so selected.

Comply with manufacturer's recommendations for selection of hardness, depending upon location of each application, conditions at time of installation, and performance requirements as indicated. Select materials, and variations or modifications, carefully for compatibility with surfaces contacted in installation.

Two-Part Polysulfide Glazing Sealant: Elastomeric polysulfide sealant complying with FS TT-S- 227, Class A, Type 2; specially compounded and tested to show a minimum of 20 years resistance to deterioration in normal glazing applications.

One-Part Silicone Rubber Glazing Sealant: Elastomeric silicone sealant complying with FS TT- S-001543, Class A, non-sag. Provide acid type recommended by manufacturer where only nonporous bond surfaces are contacted; provide non-acid type recommended where one or more porous bond surfaces are contacted.

Acrylic-Emulsion Glazing Sealant: Emulsion of acrylic, with or without latex rubber modification; compounded specifically for glazing; non-hardening, non-staining and nonbleeding. Use only for interior glazing.

2.04 GLAZING GASKETS

Polyvinyl Chloride Glazing Gaskets: Extruded, flexible PVC gaskets of the profile and hardness shown, or as required for watertight construction; comply with ASTM D-2287.

Vinyl Foam Glazing Tape: Closed cell, flexible, self-adhesive, non-extruding, polyvinyl chloride foam tape; recommended by manufacturer for exterior, exposed, watertight installation of glass, with only nominal pressure in the glazing channel; comply with ASTM D-1667.

2.05 MISCELLANEOUS GLAZING MATERIALS

Cleaners, Primers and Sealers: Type recommended by sealant or gasket manufacturer.

Setting Blocks: Neoprene or EPDM, 70-90 durometer hardness with proven compatibility with sealants used.

Compressible Filler (Rod): Closed-cell or waterproof-jacketed rod stock of synthetic rubber or plastic foam, proven to be compatible with sealants used, flexible and resilient, with 5-10 psi compression strength for 25% deflection.

PART THREE - EXECUTION

3.01 INSPECTION

General: Prior to installation of glass and glazing, examine all conditions, notify Contractor and Architect in writing of any detrimental conditions. Do not proceed until all conditions are satisfactory.

3.02 STANDARDS AND PERFORMANCE

Note: Watertight and airtight installation of each glass product is required, except as otherwise shown. Each installation must withstand normal temperature changes, wind loading, impact loading (for operating sash and doors), without failure including loss or breakage of glass, failure of sealants or gaskets to remain watertight and airtight, deterioration of glazing materials and other defects in work.

Handling of Glass: Protect glass from edge damage during handling and installation, and subsequent operation of glazed components of work. During installation, discard units with significant edge damage or other imperfections.

Dimensions: Glazing channel dimensions as shown are intended to provide for necessary bite on glass, minimum edge clearance, and adequate sealant thicknesses, with reasonable tolerances.

Adjust as required by job conditions at time of installation.

Glass Installation: Comply with combined recommendations and technical reports by manufacturers of glass and glazing products as used in each glazing channel, and with recommendations at Flat Glass Marketing Association "Glazing Manual", except where more stringent requirements are indicated.

3.03 PREPARATION

Cleaning: Clean glazing channel and other framing members to receive glass, immediately before glazing. Remove coatings which are not firmly bonded to substrate. Remove lacquer from metal surfaces where elastomeric sealants are used.

Primer and Sealants: Apply primer and sealant to joint surfaces where recommended by sealant manufacturer.

3.04 INSTALLATION

Setting Blocks: Install setting blocks of proper size in sill rabbet, located 1/4 of glass width from each corner. Set blocks in thin course of heel-bead compound (if any).

Spacers: Provide spacers inside and out, of proper size and spacing, for glass sizes larger than 50 united inches, except where gaskets or pre-shimmed tapes are used for glazing. Provide 1/8 inch minimum bite of spacers on glass and use thickness slightly less than final compressed thickness of tape.

Note: Set units of glass in each series with uniformity of pattern, draw, bow and similar characteristics.

Filler Rods: Prevent exudation of sealant or compound by forming voids or installing filler rods in channel at heel of jambs and head (do not leave voids in sill channels), except as otherwise indicated and depending on light size, thickness and type of glass, and complying with manufacturer's recommendations.

Sealants: Force sealants into channel to eliminate voids and to ensure complete "wetting" or bond of sealant to glass and channel.

Tooling of Sealants: Tool exposed surfaces of glazing liquids and compounds to provide a substantial "wash" away from glass. Install pressurized tapes and gaskets to protrude slightly out of channel, so as to eliminate dirt and moisture pockets. Clean and trim excess glazing materials from glass and stops or frames promptly after installation, and eliminate stains and discolorations.

Gaskets: Where wedge-shaped gaskets are driven into one side of channel to pressurize sealant or gasket on opposite side, provide adequate anchorage to ensure that gasket will not "walk" out when installation is subjected to movement. Anchor gasket to stop with matching ribs, or by proven adhesives, including embedment of gasket tail in cured heel bead.

Gasket Glazing: Miter cut and bond ends together at corners where gaskets are used for channel glazing, so that gaskets will not pull away from corners and result in voids or leaks in glazing system.

3.05 ADJUSTMENT AND CLEANING

Damaged Units: Remove and replace glass which is broken, chipped, cracked, abraded or damaged in other ways during construction period, including natural causes, accidents and vandalism.

Cleaning: Wash and polish glass on both faces not more than four days prior to date

scheduled for inspections intended to establish date of substantial completion in each area of Project.

Comply with glass product manufacturer's recommendations for final cleaning.

3.06 PROTECTION

General: Protect exterior glass from breakage immediately upon installation, by use of crossed streamers attached to framing and held away from glass. Do not apply markers to surfaces of glass. Remove nonpermanent labels and clean surfaces. Cure sealants for high early strength and durability.

PAINTING

PART ONE - GENERAL

1.01 RELATED DOCUMENTS

General: Bidding and/or Negotiations Requirements, General Conditions of the Contract, Supplementary Conditions, pertinent portions of sections in Division 1 of the Project Specifications and the Drawings shall apply to the Work of this Section.

1.02 WORK INCLUDED

Scope: Provide painting as indicated on Drawings and specified herein.

Work Included: Work in general includes painting and finishing of interior and exterior exposed items throughout Project; including ferrous metals, woodwork, concrete masonry, gypsum drywall, plaster and other items normally requiring paint finish unless otherwise indicated.

Special Note: Surface preparation, priming and coats of paint specified are in addition to shop- priming and surface treatment specified under other sections of work.

Definitions: "Paint" as used herein means all coating systems materials, including primers, emulsions, enamels, stains, sealers and fillers, and other applied materials whether used as a prime, intermediate or finish coats.

General: Paint exposed surfaces whether or not colors are designated in "schedules", except where natural finish of material is specifically noted as a surface not to be painted. Where items or surfaces are not specifically mentioned, paint same as adjacent similar materials or areas. If color or finish is not designated, Architect will select these from standard colors available for materials systems specified.

Note: Do not paint exterior concrete, exterior insulation and finish system, aluminum, and factory finished materials.

Work Not Included: Following categories of work are not included as part of field-painted finish work, or are included in other sections of these specifications.

- A. Shop Priming: Unless otherwise specified, shop priming of ferrous metal items is included under various sections for structural steel, miscellaneous metal, hollow metal work, and similar items. Also, for fabricated components such as architectural woodwork, wood casework, and shop-fabricated or factory-built mechanical and electrical equipment or accessories.
- B. Pre-Finished Items: Unless otherwise indicated, do not include painting when factory- finishing or installer finishing is specified for such items as (but not limited to) toilet enclosures, prefinished partition systems, acoustic materials, architectural woodwork and casework, finished mechanical and electrical equipment including light fixtures, switchgear and distribution cabinets, elevator entrance frames, doors and equipment.

- C. **Concealed Surfaces:** Unless otherwise indicated, painting is not required on surfaces such as walls or ceilings in concealed areas and generally inaccessible areas, foundation spaces, furred areas, utility tunnels, pipe spaces, duct shafts and elevator shafts.
- D. **Finished Metal Surfaces:** Metal surfaces of anodized aluminum, stainless steel, chromium plate, copper, bronze and similar finished materials will not require finish painting, unless otherwise indicated.
- E. **Code Required Labels:** Do not paint over any code-required labels, such as Underwriters' Laboratories and Factory Mutual, or any equipment identification, performance rating, name, or nomenclature plates.

1.03 SUBMITTALS

General: Submit in accordance with requirements of Section 01 33 23 - "Submittals and Shop Drawings".

Product Data: Submit manufacturer's technical information including paint label analysis and application instructions for each material proposed for use.

1.04 SUBSTITUTIONS

General: For products specified herein, Bids shall be based on products named in Project Manual, or on items which Architect has designated as an "approved equal". A product not named in Project Manual or that is not approved by Architect will only be acceptable when such product meets all other requirements of Project Specifications, including specifications of originally specified products' manufacturer as of date of Contract Documents.

Requests for Substitutions: Requests for Architects approval of a product as equal will not be considered unless sufficient data for evaluation is received by Architect seven (7) days prior to the Bid Opening Date.

Submittals: Submit a separate request for each Product in accordance with requirements of Section 01 62 00 - "Substitutions and Product Options".

Note: Architect's or Owner's approval of an item for a previous project does not constitute approval for this Project.

1.05 COLORS AND SAMPLES

Paint Colors: As selected by Architect or Owner. Architect or Owner will furnish color chips, color schedule before painting Work is begun. Prepare samples as required. Do not proceed beyond "prime" or "size" stage until colors have been approved.

1.06 DELIVERY AND STORAGE

Delivery: Deliver materials to site in original, new and unopened packages and containers bearing manufacturer's name and label, and following information:

- A. Name or title of material.
- B. Federal Spec. number, if applicable.
- C. Manufacturer's stock number and date of manufacture.

- D. Manufacturer's name.
- E. Contents by volume, for major pigment and vehicle constituents.
- F. Thinning instructions.
- G. Application instructions.
- H. Color name and number.

Storage: All paint materials used on Project shall be stored in a single place or space. Storage area shall be kept clean; all damage to storage area or its surrounding shall be repaired as required.

Note: Remove from building at end of each work day; oily rags, waste, etc.; take every precaution to avoid danger of fire.

1.07 JOB CONDITIONS

Paint Application: Apply paints as follows:

- A. Apply water-based paints only when temperature of surfaces to be painted and surrounding air temperatures are between 50o F and 90o F, unless otherwise permitted by paint manufacturer's printed instructions.
- B. Apply solvent-thinned paints only when temperature of surfaces to be painted and surrounding air temperatures are between 45o F and 95o F, unless otherwise permitted by paint manufacturer's printed instructions.
- C. Do not apply paint in snow, rain, fog or mist; or when relative humidity exceeds 85%; or to damp or wet surfaces; unless otherwise permitted by paint manufacturer's printed instructions.
- D. Painting may be continued during inclement weather if areas and surfaces to be painted are enclosed and heated within temperature limits specified by paint manufacturer during application and drying periods.
- E. Thinning: Only in accordance with manufacturer's instructions.

PART TWO - PRODUCTS

2.01 GENERAL PRODUCT REQUIREMENTS

Paint, Enamel, Varnish, Stains: Of type hereinafter specified under Schedule of Painting headings.

Materials: Of highest quality of their respective types as made by Glidden, Benjamin-Moore, Pittsburgh, Sherwin-Williams, Dupont or Pratt & Lambert. Prior to beginning painting work, submit for approval complete list of manufacturer's products, trade names proposed for use; this is in addition to required prior approval of manufacturer. Materials not displaying manufacturer's identification as a standard, best-grade product will not be acceptable.

Color Pigments: Pure, non-fading, applicable types to suit substrates and service indicated.

Paint Coordination: Provide finish coats which are compatible with prime paints used. Review other sections of these specifications in which prime paints are to be provided to ensure compatibility of total coatings system for various substrates. Upon request from other trades, furnish information on characteristics of finish materials proposed for use, to ensure compatible prime coats are used. Provide barrier coats over incompatible primers or remove and reprime as required.

Notice: Notify Architect in writing of any anticipated problems using specified coating systems with substrates primed by others.

Federal Specifications: Minimum acceptable quality for paint materials. Provide written certification from paint manufacturer that materials provided meet or exceed these minimums.

Note: Manufacturer's products which comply with coating qualitative requirements of applicable Federal Specifications, yet differ in quantitative requirements, may be considered for use when acceptable to Architect. Furnish material data and manufacturer's certificate of performance to Architect for any proposed substitutions.

Undercoats: Provide undercoat paint produced by same manufacturer as finish coats. Use only thinners approved by paint manufacturer, and use only within recommended limits.

PART THREE - EXECUTION

3.01 INSPECTION

General: Applicator must examine areas and conditions under which painting work is to be applied and notify Contractor and Architect in writing of conditions detrimental to proper and timely completion of work. Do not proceed with work until unsatisfactory conditions have been corrected in a manner acceptable to Applicator.

Note: Starting of painting work will be construed as Applicator's acceptance of surfaces and conditions within any particular area.

Precaution: Do not paint over dirt, rust, scale, grease, moisture, scuffed surfaces, or conditions detrimental to formation of a durable paint film.

3.02 SURFACE PREPARATION

General: Perform preparation and cleaning procedures in accordance with paint manufacturer's instructions and as herein specified, for each particular substrate condition.

Hardware Removal: Remove hardware, hardware accessories, machined surfaces, plates, lighting fixtures, and similar items in place and not to be finish painted, or provide surface-applied protection prior to surface preparation and painting operations. Remove, if necessary, for complete painting of items and adjacent surfaces. Following completion of painting of each space or area, reinstall removed items.

Cleaning: Clean surfaces to be painted before applying paint or surface treatments. Remove oil and grease prior to mechanical cleaning. Program cleaning and painting so that contaminants from cleaning process will not fall onto wet, newly-painted surfaces.

Cementitious Materials: Prepare cementitious surfaces of concrete, concrete block, cement plaster and cement-asbestos board to be painted by removing efflorescence, chalk, dust, dirt, grease, oils, and by roughening as required to remove glaze.

Surface Tests: Determine alkalinity and moisture content of surfaces to be painted by performing appropriate tests. If surfaces are found to be sufficiently alkaline to cause

blistering and burning of finish paint, correct this condition before application of paint. Do not paint over surfaces where moisture content exceeds that permitted in manufacturer's printed directions.

Wood: Clean wood surfaces to be painted of dirt, oil, or other foreign substances with scrapers, mineral spirits, and sandpaper, as required. Sandpaper smooth those finished surfaces exposed to view, and dust off. Scrape and clean small, dry, seasoned knots and apply a thin coat of white shellac or other recommended knot sealer, before application of priming coat. After priming, fill holes and imperfections in finish surfaces with putty or plastic wood-filler. Sandpaper smooth when dried.

- A. Prime, stain, or seal wood required to be job-painted immediately upon delivery to job. Prime edges, ends, faces, undersides, and backsides of such wood, including cabinets, counters, cases, paneling.
- B. When transparent finish is required, use spar varnish for back-priming.
- C. Back-prime paneling on interior partitions only where masonry, plaster, or other wet wall construction occurs on backside.
- D. Seal tops, bottoms, and cut-outs of unprimed wood doors with a heavy coat of varnish or equivalent sealer immediately upon delivery to job.

Ferrous Metals: Clean ferrous surfaces, which are not galvanized or shop-coated, of oil, grease, dirt, loose mill scale and other foreign substances by solvent or mechanical cleaning.

- A. Touch-up shop-applied prime coats wherever damaged or bare, where required by other sections of these specifications. Clean and touch-up with same type shop primer.

Galvanized Surfaces: Clean free of oil and surface contaminants with non-petroleum based solvent.

3.03 MATERIALS PREPARATION

General: Mix and prepare painting materials in accordance with manufacturer's directions.

Storage: Store materials not in actual use in tightly covered containers. Maintain containers used in storage, mixing and application of paint in a clean condition, free of foreign materials and residue.

Preparation: Stir materials before application to produce a mixture of uniform density, and stir as required during application. Do not stir surface film into material. Remove film and, if necessary, strain material before using.

3.04 APPLICATION:

General: Apply paint in accordance with manufacturer's directions. Use applicators and techniques best suited for substrate and type of material being applied and as follows:

- A. Apply additional coats when undercoats, stains or other conditions show through final coat of paint, until paint film is of uniform finish, color and appearance. Give special attention to insure that surfaces, including edges, corners, crevices, welds, and exposed fasteners receive a dry film thickness equivalent to that of flat surfaces.
- B. Paint surfaces behind movable equipment and furniture same as similar exposed

- surfaces. Paint surfaces behind permanently-fixed equipment or furniture with prime coat only before final installation of equipment.
- C. Paint interior surfaces of ducts, where visible through registers or grilles, with a flat, non- specular black paint.
- D. Paint back sides of access panels, and removable or hinged covers to match exposed surfaces.
- E. Finish exterior doors on tops, bottoms and side edges same as exterior faces, unless otherwise indicated.
- F. Sand lightly between each succeeding enamel or varnish coat.
- G. Omit first coat (primer) on metal surfaces which have been shop-primed and touch-up painted, unless otherwise indicated.

Scheduling Painting: Apply first-coat material to surfaces that have been cleaned, pretreated or otherwise prepared for painting as soon as practicable after preparation and before subsequent surface deterioration.

- A. Allow sufficient time between successive coatings to permit proper drying. Do not recoat until paint has dried to where it feels firm, does not deform or feel sticky under moderate thumb pressure, and application of another coat of paint does not cause lifting or loss of adhesion of the undercoat.

Minimum Coating Thickness: Apply materials at not less than manufacturer's recommended spreading rate, to establish a total dry film thickness as indicated or, if not indicated, as recommended by coating manufacturer.

Prime Coats: Apply prime coat of material which is required to be painted or finished, and which has not been prime coated by others.

- A. Recoat primed and sealed surfaces where there is evidence of suction spots or unsealed areas in first coat, to assure a finish coat with no burn-through or other defects due to insufficient sealing.

Transparent (Clear) Finishes: Use multiple coats to produce glass-smooth surface film of even luster. Provide a finish free of laps, cloudiness, color irregularity, runs, brush marks, orange peel, nail holes, or other surface imperfections.

- A. Provide satin finish for final coats, unless otherwise indicated.

Completed Work: Match approved samples for color, texture and coverage. Remove, refinish or repaint work not in compliance with specified requirements.

3.05 CLEAN-UP AND PROTECTION

Clean-Up: During progress of work, remove from site discarded paint materials, rubbish, cans and rags at end of each work day.

Final Clean-Up: Upon completion of painting work, clean window glass and other paint-spattered surfaces. Remove spattered paint by proper methods of washing and scraping, using care not to scratch or otherwise damage finished surfaces.

Protection: Protect work of other trades, whether to be painted or not, against damage by painting and finishing work. Correct any damage by cleaning, repairing or replacing,

and repainting, as acceptable to Architect.

Signs: Provide "Wet Paint" signs as required to protect newly-painted finishes. Remove temporary protective wrappings provided by others for protection of their work, after completion of painting operations.

Note: At the completion of work of other trades, touch-up and restore all damaged or defaced painted surfaces.

PAINT SCHEDULE

PART ONE - EXTERIOR PAINTING

- 1.01 GENERAL: Provide following paint systems for various exterior substrates, as indicated.
- 1.02 EXTERIOR PAINT SYSTEM EP-1: Zinc-Coated Metal; provide the following finish systems over exterior zinc-coated (galvanized) metal surfaces:
 - A. Low-Luster Finish: 2 finish coats over a galvanized metal primer.
 - B. Primer: Galvanized metal primer applied at spreading rate recommended by the manufacturer to achieve a total dry film thickness of not less than 1.2 mils.
 - 1. Devoe: 8502/8520 Mirrolac Interior/Exterior Waterborne Flat DTM Primer and Finish.
 - 2. Fuller: 621-05 Blox-Rust Latex Metal Primer.
 - 3. Glidden: 5205 Glid-Guard Tank & Structural Primer, Red.
 - 4. Moore: IronClad Galvanized Metal Latex Primer #155.
 - 5. PPG: 90-709 Pitt-Tech One Pack Interior/Exterior Primer/Finish DTM Industrial Enamel.
 - 6. P & L: Z/F 1003 Suprime "3" Interior/Exterior Latex Metal Primer
 - C. First and Second Coat: Low-luster (eggshell or satin), exterior, acrylic-latex paint applied at spreading rate recommended by the manufacturer to achieve a total dry film thickness of not less than 2.8 mils.
 - 1. Devoe: 16XX Wonder-Shield Exterior Acrylic Latex Satin House and Trim Paint.
 - 2. Fuller: 261-XX Eggshell Sheen Latex House and Trim Paint.
 - 3. Glidden: 6700 Series Spred Ultra Exterior Satin Latex House and Trim Paint.
 - 4. Moore: MoorGard Latex House Paint #103.
 - 5. PPG: 76 Line Sun-Proof Exterior House & Trim Acrylic Satin Latex.
 - 6. P & L: Z/F 4200 Series Accolade Exterior Eggshell.

PART TWO - INTERIOR PAINTING:

- 2.01 General: Provide following paint systems of various interior substrates, as indicated.
- 2.02 Interior Paint System IP-1: Uncoated ferrous metal exposed to view in all finished or painted areas and spaces (shop primed) shall be painted as follows:
 - A. Semigloss, Acrylic-Enamel Finish: One finish coat over an enamel undercoater and a primer.
 - B. Primer: Quick-drying, rust-inhibitive, alkyd-based or epoxy-metal primer, as recommended by the manufacturer for this substrate, applied at spreading rate recommended by the manufacturer to achieve a total dry film thickness of not less than 1.5 mils.
 - 1. Devoe: 3101 Mirrolac Rust Penetrating Metal Primer.
 - 2. Fuller: 621-04 Blox-Rust Alkyd & Structural Metal Primer.
 - 3. Glidden: 5207 Glid-Guard Tank & Structural Primer, White.
 - 4. Moore: IronClad Retardo Rust-Inhibitive Paint #163.
 - 5. PPG: 6-208 Speedhide Interior/Exterior Rust Inhibitive Steel Primer.
 - 6. P & L: S 4551 Tech-Gard High Performance Rust Inhibitor Primer.
 - C. Undercoat: Alkyd, interior enamel undercoat or semi-gloss, acrylic-latex, interior enamel, as

recommended by the manufacturer for this substrate, applied at spreading rate recommended by the manufacturer to achieve a total dry film thickness of not less than 1.3 mils.

- 1.Devoe: 39XX Wonder-Tones Semi-Gloss Interior Latex Enamel.
 - 2.Fuller: 220-07 Interior Alkyd Enamel Undercoat.
 - 3.Glidden: 8200 Series Spred Ultra Latex Semi-Gloss Enamel.
 - 4.Moore: Moore's Alkyd Enamel Underbody #217.
 - 5.PPG: 6-6 Speedhide Interior Quick-Drying Enamel Undercoater.
 - 6.P & L: Z/F 4100 Series Accolade Interior Semi-Gloss.
- D. Finish Coat: Semigloss, acrylic-latex, interior enamel applied at spreading rate recommended by the manufacturer to achieve a total dry film thickness of not less than 1.3 mils.
- 1.Devoe: 39XX Wonder-Tones Semi-Gloss Interior Latex Enamel.
 2. Fuller: 214-XX AA Enamel Interior Acrylic Latex Semi-Gloss Enamel.
 3. Glidden: 8200 Series Spred Ultra Latex Semi-Gloss Enamel.
 4. Moore: Moore's Regal AquaGlo Vinyl-Acrylic Latex Enamel #333.
 5. PPG: 88-110 Satinhide Interior Enamel Wall & Trim Lo-Lustre Semi-Gloss Latex.
 6. P & L: Z/F 4100 Series Accolade Interior Semi-Gloss.
- E. First coat not required on items that are shop primed.

2.03 Interior Paint System IP-2: Stained woodwork shall be finished as follows:

- A. Waterborne, Satin-Varnish Finish: 2 finish coats of a waterborne, clear-satin varnish over a sealer coat and a waterborne, interior wood stain. Wipe wood filler before applying stain.
- B. Filler Coat: Paste-wood filler applied at spreading rate recommended by the manufacturer.
- 1.Devoe: None required.
 - 2.Moore: Benwood Paste Wood Filler #238.
 - 3.PPG: None required.
 - 4.P & L: None required.
- C. Stain Coat: Waterborne, interior wood stain applied at spreading rate recommended by the manufacturer.
- 1.Devoe: 41XX WoodWorks Waterborne Interior Stain.
 - 2.Moore: Benwood Penetrating Stain #234.
 - 3.PPG: 77-302 Rez Interior Semi-Transparent Stain.
 - 4.P & L: Z 197 Acrylic Latex Stain Interior.
- D. Sealer Coat: Clear sanding sealer applied at spreading rate recommended by the manufacturer.
- 1.Devoe: 4200 WoodWorks Waterborne Quick-Dry Clear Sealer.
 - 2.Moore: None recommended.
 - 3.PPG: 77-30 Rez Interior Quick-Drying Sealer and Finish.
 - 4.P & L: Z 7520 Latex Sanding Sealer.
- E. First and Second Finish Coats: Waterborne, varnish finish applied at spreading rate recommended by the manufacturer.
- 1.Devoe: 4300 WoodWorks Waterborne Crystal Clear Finish, Satin.
 - 2.Moore: Stays Clear Acrylic Polyurethane #423, Satin.
 - 3.PPG: 77-49 Rez Satin Acrylic Clear Polyurethane.
 - 4.P & L: Z 17 Acrylic Latex Varnish, Satin.

LOUISIANA UNIFORM PUBLIC WORK BID

To: Grambling State University
403 Main Street
Grambling, LA 71245

Bid For: Door Replacement for Carver Hall
Grambling State University
403 Main Street
Grambling, LA 71245

The undersigned bidder hereby declares and represents that she/he; a) has carefully examined and understands the Bidding Documents, b) has not received, relied on, or based his bid on any verbal instructions contrary to the Bidding Documents or any addenda, c) has personally inspected and is familiar with the project site, and hereby proposes to provide all labor, materials, tools, appliances and facilities as required to perform, in a workmanlike manner, all work and services for the construction and completion of the referenced project, all in strict accordance with the Bidding Documents prepared by: Grambling State University and dated: April 20, 2020.

Bidders must acknowledge all addenda. The Bidder acknowledges receipt of the following **ADDENDA:** (Enter the number the Designer has assigned to each of the addenda that the Bidder is acknowledging)

TOTAL BASE BID Scope of Carver Hall Thirty (30) Doors: For all work required by the Bidding Documents (including any and all unit prices designated "Base Bid" * but not alternates) the sum of:
_____ Dollars (\$_____)

NAME OF BIDDER: _____

ADDRESS OF BIDDER: _____

PHONE NUMBER: _____ **DATE:** _____

LOUISIANA CONTRACTOR'S LICENSE NUMBER: _____

NAME OF AUTHORIZED SIGNATORY OF BIDDER: _____

TITLE OF AUTHORIZED SIGNATORY OF BIDDER: _____

SIGNATURE OF AUTHORIZED SIGNATORY OF BIDDER **: _____

* The Unit Price Form shall be used if the contract includes unit prices. Otherwise it is not required and need not be included with the form. The number of unit prices that may be included is not limited and additional sheets may be included if needed ** If someone other than a corporate officer signs for the Bidder/Contractor, a copy of a corporate resolution or other signature authorization shall be required for submission of bid. Failure to include a copy of the appropriate signature authorization, if required, may result in the rejection of the bid unless bidder has complied with La. R.S. 38:2212(A)(1)(c) or RS 38:2212(O) .

BID SECURITY in the form of a bid bond, certified check or cashier's check as prescribed by LA RS 38:2218.A is attached to and made a part of this bid.

MANDATORY REQUIREMENT

PLEASE SCHEDULE AN APPOINTMENT for **10:00 a.m., APRIL 6th or 7th, 2021** with **Renee Harris, Project Manager, Cell: 318-243-7864, Email: harrispat@gram.edu**

This signed statement certifies that the Contractor named below has visited the job site and is familiar with all conditions surrounding fulfillment of the specifications for this project.

Contractor's Company Name

GSU Project Name

GSU Representative

Vendor's Signature

Present this form to Project Manager and return this signed form with your bid response.